

What is claimed is:

1. A slide hammer comprising:

a guide sleeve having a distal end and a proximal end, said guide sleeve further having an inner surface defining a longitudinal passageway therein;

an impact head receiving section removably attached to said distal end of said guide sleeve; said receiving section having a means for removably attaching the receiving section to said distal end of said guide sleeve;

an impact head slidably secured within said receiving section, said impact head having a proximal end which remains within said receiving section, and a distal end including an impact extension which extends beyond said distal end of said receiving section; and

a plunger inserted through said proximal end of said guide sleeve and into said longitudinal passageway, said plunger having a proximal end which extends proximally beyond said proximal end of said guide sleeve, said guide sleeve and said plunger extending along a longitudinal axis of said slide hammer, said plunger being slidable within said longitudinal passageway for selective contact with said proximal end of said impact head, wherein the contact between said plunger and said impact head results in a force transmitted to said distal end of said impact head.

2. A slide hammer, as claimed in Claim 1, wherein:

said means for removably attaching includes threads formed on an internal surface of said receiving section.

3. A slide hammer, as claimed in Claim 1, wherein:

said impact extension has a non-circular cross-sectional shape, and said impact head receiving section includes a complimentary opening for receiving said distal end of said impact extension thereby preventing rotation of said impact head with respect to said impact head receiving section when said impact head moves with respect to said receiving section.

4. A slide hammer, as claimed in Claim 1, further including:

a spring placed within said impact head receiving section and communicating with said impact head thereby dampening the movement of said impact head with respect to said impact head receiving section.

5. A slide hammer comprising:

a guide sleeve having a distal end and a proximal end, said guide sleeve further having an inner surface defining a longitudinal passageway therein;

an impact head slidably secured within said longitudinal passageway of said guide sleeve, said impact head having a proximal end which remains within said longitudinal passageway, and a distal end including an impact extension which extends beyond said distal end of said guide sleeve;

a plunger inserted through said proximal end of said guide sleeve and into said longitudinal passageway, said plunger having a proximal end which extends proximally beyond said proximal end of said guide sleeve, said guide sleeve and said plunger

extending along a longitudinal axis of said slide hammer, said plunger being slidable within said longitudinal passageway for selective contact with said proximal end of said impact head, wherein the contact between said plunger and said impact head results in a force transmitted to said distal of said impact head; and

15            an end cap attached to said proximal end of said guide sleeve, said end cap having means communicating with said plunger for preventing removal of said plunger within said guide sleeve.

6.        A slide hammer, as claimed in Claim 5, wherein:

          said preventing means includes a circumferential flange extending radially inwards toward said plunger.

7.        A slide hammer comprising:

          a guide sleeve having a distal end and a proximal end, said guide sleeve further having an inner surface defining a longitudinal passageway therein;

          an impact head slidably secured within said longitudinal passageway of said guide sleeve, said impact head having a proximal end which remains within said longitudinal passageway, and a distal end including an impact extension which extends beyond said distal end of said guide sleeve;

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          a plunger inserted through said proximal end of said guide sleeve and into said longitudinal passageway, said plunger having a proximal end which extends proximally beyond said proximal end of said guide sleeve, said guide sleeve and said plunger

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extending along a longitudinal axis of said slide hammer, said plunger being slidable within said longitudinal passageway for selective contact with said proximal end of said impact head, wherein the contact between said plunger and said impact head results in a force transmitted to said distal of said impact head; and

15           a removable tip attached to said distal end of said impact head, said removable tip including a shank, and an offset section attached to said shank and spaced a lateral distance therefrom, thereby allowing a force to be transmitted to said tip and through said tip which is offset from said longitudinal axis.

8.    A slide hammer comprising:

          a guide sleeve having a distal end and a proximal end, said guide sleeve further having an inner surface defining a longitudinal passageway therein;

          an impact head slidably secured within said longitudinal passageway of said guide sleeve, said impact head having a proximal end which remains within said longitudinal passageway, and a distal end including an impact extension which extends beyond said distal end of said guide sleeve;

5           a plunger inserted through said proximal end of said guide sleeve and into said longitudinal passageway, said plunger having a proximal end which extends proximally beyond said proximal end of said guide sleeve, said guide sleeve and said plunger extending along a longitudinal axis of said slide hammer, said plunger being slidable within said longitudinal passageway for selective contact with said proximal end of said

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impact head, wherein the contact between said plunger and said impact head results in a force transmitted to said distal of said impact head; and

15           a removable tip attached to said distal end of said impact head, said removable tip including a shank, an offset section attached to said shank and spaced laterally therefrom, a mount attached to said offset section, and a well formed in said mount, thereby allowing a force to be transmitted to and through said tip which is offset from said longitudinal axis.

9.       A slide hammer comprising:

          a guide sleeve having a distal end and a proximal end, said guide sleeve further having an inner surface defining a longitudinal passageway therein;

          an impact head slidably secured within said longitudinal passageway of said guide sleeve, said impact head having a proximal end which remains within said longitudinal passageway, and a distal end including an impact extension which extends beyond said distal end of said guide sleeve;

          a plunger inserted through said proximal end of said guide sleeve and into said longitudinal passageway, said plunger having a proximal end which extends proximally beyond said proximal end of said guide sleeve, said guide sleeve and said plunger extending along a longitudinal axis of said slide hammer, said plunger being slidable within said longitudinal passageway for selective contact with said proximal end of said impact head, wherein the contact between said plunger and said impact head results in a force transmitted to said distal of said impact head; and

15           a removable tip attached to said distal end of said impact head, said removable tip including a pair of fork extensions extending from said distal end of said guide sleeve, each said fork extensions having a notch formed on a distal end of the fork extensions.

10.     A slide hammer comprising:

          a guide sleeve having a distal end and a proximal end, said guide sleeve further having an inner surface defining a longitudinal passageway therein;

          an impact head slidably secured within said longitudinal passageway of said guide sleeve, said impact head having a proximal end which remains within said longitudinal passageway, and a distal end including an impact extension which extends beyond said distal end of said guide sleeve;

          a plunger inserted through said proximal end of said guide sleeve and into said longitudinal passageway, said plunger having a proximal end which extends proximally beyond said proximal end of said guide sleeve, said guide sleeve and said plunger extending along a longitudinal axis of said slide hammer, said plunger being slidable within said longitudinal passageway for selective contact with said proximal end of said impact head, wherein the contact between said plunger and said impact head results in a force transmitted to said distal of said impact head; and

15           a removable tip attached to said distal end of said impact head, said removable tip including a shank, and a threaded section attached to a distal end of said shank, said threaded section having a distal end including an opening formed therethrough and aligned with said longitudinal axis.

11. A slide hammer comprising:

a guide sleeve having a distal end and a proximal end, said guide sleeve further having an inner surface defining a longitudinal passageway therein;

an impact head slidably secured within said longitudinal passageway of said guide sleeve, said impact head having a proximal end which remains within said longitudinal passageway, and a distal end including an impact extension which extends beyond said distal end of said guide sleeve;

a plunger inserted through said proximal end of said guide sleeve and into said longitudinal passageway, said plunger having a proximal end which extends proximally beyond said proximal end of said guide sleeve, said guide sleeve and said plunger extending along a longitudinal axis of said slide hammer, said plunger being slidable within said longitudinal passageway for selective contact with said proximal end of said impact head, wherein the contact between said plunger and said impact head results in a force transmitted to said distal of said impact head; and

a removable tip attached to said distal end of said impact head, said removable tip including a shank, and a pair of conical extensions extending from a distal end of said shank, said conical sections having truncated ends thereby forming substantially circular shaped impact surfaces.

12. A slide hammer comprising:

a guide sleeve having a distal end and a proximal end, said guide sleeve further having an inner surface defining a longitudinal passageway therein;

an impact head slidably secured within said longitudinal passageway of said guide sleeve, said impact head having a proximal end which remains within said longitudinal passageway, and a distal end including an impact extension which extends beyond said distal end of said guide sleeve;

a plunger inserted through said proximal end of said guide sleeve and into said longitudinal passageway, said plunger having a proximal end which extends proximally beyond said proximal end of said guide sleeve, said guide sleeve and said plunger extending along a longitudinal axis of said slide hammer, said plunger being slidable within said longitudinal passageway for selective contact with said proximal end of said impact head, wherein the contact between said plunger and said impact head results in a force transmitted to said distal of said impact head; and

a removable tip attached to said distal end of said impact head, said removable tip including a shank, and a pry portion connected to said shank, said pry portion having a semi-circular shape bevel formed on a distal end of said pry portion.

13. A slide hammer comprising:

a guide sleeve having a distal end and a proximal end, said guide sleeve further having an inner surface defining a longitudinal passageway therein;

an impact head slidably secured within said longitudinal passageway of said guide  
5 sleeve, said impact head having a proximal end which remains within said longitudinal  
passageway, and a distal end including an impact extension which extends beyond said  
distal end of said guide sleeve;

a plunger inserted through said proximal end of said guide sleeve and into said  
longitudinal passageway, said plunger having a proximal end which extends proximally  
10 beyond said proximal end of said guide sleeve, said guide sleeve and said plunger  
extending along a longitudinal axis of said slide hammer, said plunger being slidable  
within said longitudinal passageway for selective contact with said proximal end of said  
impact head, wherein the contact between said plunger and said impact head results in a  
force transmitted to said distal of said impact head; and

15 a removable tip attached to said distal end of said impact head, said removable tip  
including a shaft having a distal end including an opening formed therein, a securing  
screw received in said opening, and at least one disk placed between said securing screw  
and said distal end of said shaft.

14. A slide hammer comprising:

a guide sleeve having a distal end and a proximal end, said guide sleeve further  
having an inner surface defining a longitudinal passageway therein;

an impact head receiving section extending from said distal end of said guide  
5 sleeve;

an impact head slidably secured within said receiving section, said impact head having a proximal end which remains within said receiving section, and a distal end including an impact extension which extends beyond said distal end of said receiving section;

10           said impact head receiving section having a non-circular opening for receiving said impact extension which also includes a non-circular cross-sectional shape; and  
a plunger inserted through said proximal end of said guide sleeve and into said longitudinal passageway, said plunger having a proximal end which extends proximally beyond said proximal end of said guide sleeve, said guide sleeve and said plunger  
15           extending along a longitudinal axis of said slide hammer, said plunger being slidable within said longitudinal passageway for selective contact with said proximal end of said impact head, wherein the contact between said plunger and said impact head results in a force transmitted to said distal end of said impact head.

15.     A slide hammer, as claimed in Claim 14, wherein:

          said impact head receiving section is removably attached to said guide sleeve, and said receiving section includes means especially adapted for removably attaching the receiving section.

16.     A slide hammer, as claimed in Claim 15, wherein:

          said means for removably attaching includes threads formed on an internal surface of said receiving section.

17. A slide hammer, as claimed in Claim 14, further including:  
a spring placed within said impact head receiving section and communicating  
with said impact head thereby dampening the movement of said impact head with respect  
to said impact head receiving section.